

CLEAN AMENDED PARAGRAPHS/SECTIONS/CLAIMS

In the Claims:

Please replace the following like numbered claims:

1. (Amended) A natural language interface control system for operating a plurality of devices comprising:

a 3 dimensional microphone array;

a feature extraction module coupled to the first microphone array;

a speech recognition module coupled to the feature extraction module, wherein the speech recognition module utilizes hidden Markov models and can switch between different acoustic models and different grammars, wherein at least one of the different acoustic models and at least one of the different grammars is downloaded over a network;

a natural language interface module coupled to the speech recognition module; and

a device interface coupled to the natural language interface module, wherein the natural language interface module is for operating a plurality of devices coupled to the device interface based upon non-prompted, open-ended natural language requests from a user.

6. (Amended) A natural language interface control system for operating a plurality of devices comprising:

a 3 dimensional microphone array;

a feature extraction module coupled to the first microphone array;

a speech recognition module coupled to the feature extraction module, wherein the speech recognition module utilizes

hidden Markov models and can switch between different acoustic models and different grammars;

a natural language interface module coupled to the speech recognition module; and

a device interface coupled to the natural language interface module, wherein the natural language interface module is for operating a plurality of devices coupled to the device interface based upon non-prompted, open-ended natural language requests from a user;

wherein the natural language interface abstracts each of the plurality of devices into a respective one of a plurality of grammars and a respective one of a plurality of lexica corresponding to each of the plurality of devices.

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7. (Amended) A natural language interface control system for operating a plurality of devices comprising:

a 3 dimensional microphone array;

a feature extraction module coupled to the first microphone array;

a speech recognition module coupled to the feature extraction module, wherein the speech recognition module utilizes hidden Markov models and can switch between different acoustic models and different grammars;

a natural language interface module coupled to the speech recognition module; and

a device interface coupled to the natural language interface module, wherein the natural language interface module is for operating a plurality of devices coupled to the device interface based upon non-prompted, open-ended natural language requests from a user;

wherein the natural language interface module searches for the non-prompted, open-ended user requests upon the receipt and recognition of an attention word.

8. (Amended) A natural language interface control system for operating a plurality of devices comprising:

a 3 dimensional microphone array;

a feature extraction module coupled to the first microphone array;

a speech recognition module coupled to the feature extraction module, wherein the speech recognition module utilizes hidden Markov models and can switch between different acoustic models and different grammars;

a natural language interface module coupled to the speech recognition module; and

a device interface coupled to the natural language interface module, wherein the natural language interface module is for operating a plurality of devices coupled to the device interface based upon non-prompted, open-ended natural language requests from a user;

wherein the natural language interface module context switches grammars, acoustic models, and lexica upon receipt and recognition of an attention word.

9. (Amended) A natural language interface control system for operating a plurality of devices comprising:

a 3 dimensional microphone array;

a feature extraction module coupled to the first microphone array;

a speech recognition module coupled to the feature extraction module, wherein the speech recognition module utilizes

hidden Markov models and can switch between different acoustic models and different grammars;

a natural language interface module coupled to the speech recognition module;

a device interface coupled to the natural language interface module, wherein the natural language interface module is for operating a plurality of devices coupled to the device interface based upon non-prompted, open-ended natural language requests from a user; and

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a grammar module for storing different grammars for each of the plurality of devices.

10. (Amended) A natural language interface control system for operating a plurality of devices comprising:

a 3 dimensional microphone array;

a feature extraction module coupled to the first microphone array;

a speech recognition module coupled to the feature extraction module, wherein the speech recognition module utilizes hidden Markov models and can switch between different acoustic models and different grammars;

a natural language interface module coupled to the speech recognition module;

a device interface coupled to the natural language interface module, wherein the natural language interface module is for operating a plurality of devices coupled to the device interface based upon non-prompted, open-ended natural language requests from a user; and

an acoustic model module for storing different acoustic models for each of the plurality of devices.